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ABSTRACT

A method and system for speech characterization. One embodiment includes a method for speaker verification which includes collecting data from a speaker, wherein the data comprises acoustic data and non-acoustic data. The data is used to generate a template that includes a first set of "template" parameters. The method further includes receiving a real-time identity claim from a claimant, and using acoustic data and non-acoustic data from the identity claim to generate a second set of parameters. The method further includes comparing the first set of parameters to the set of parameters to determine whether the claimant is the speaker. The first set of parameters and the second set of parameters include at least one purely non-acoustic parameter, including a non-acoustic glottal shape parameter derived from averaging multiple glottal cycle waveforms.